

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A Method for high-resolution image recording of at least one object with a microscope-(10), comprising the steps of:

[[-]]positioning the at least one object in a receptacle-(20)being arranged in thean optical axis of the microscope,

[[-]]generating at least two first data sets per object, wherein the at least two first data sets~~which~~ represent intermediate images of the at least one object with at least two different orientations relative to the optical axis of the microscope, and the at least two different orientations of the object are provided by moving the at least one object relative to the receptacle, and

[[-]]evaluating the data sets for obtaining quantitative three dimensional information;
characterized in that

~~the different orientations of the object are provided by moving the object relative to the receptacle (20).~~

2. (Currently Amended) The Method according to claim 1, wherein said moving of the at least one object relative to the receptacle comprises a translation and/or rotation of the at least one object by thean influence of electric field forces.

3. (Currently Amended) The Method according to claim 2, wherein said translation comprises at least one translation parallel and/or perpendicular relative to the optical axis.

4. (Currently Amended) The Mmethod according to claim 2, wherein said rotation comprises at least one rotation with a rotation axis parallel to the optical axis.
5. (Currently Amended) The Mmethod according to claim 2, wherein said rotation comprises at least one rotation with a rotation axis slanted relative to the optical axis.
6. (Currently Amended) The Mmethod according to claim 5, wherein said rotation axis is slanted within an angle range of up to 90 °.
7. (Currently Amended) The Mmethod according to claim 2, wherein said rotation comprises:
 - [[-]]a rotation in a continuous mode or for predetermined time periods and angles, and/or
 - [[-]]a rotation with changing rotational axes.
8. (Currently Amended) The Mmethod according to claim 2, wherein said rotation is conducted by holding the at least one object at a fixed position by ~~means of~~ said electric field forces and by rotating the at least one object by ~~means of~~ optical forces.
9. (Currently Amended) The Mmethod according to ~~claim 1 one of the foregoing claims,~~ further comprising steps of generating further intermediate images of the object, each with another focal plane, respectively[[.]], wherein each said focal planes ~~are~~ is adjusted by scanning an objective-(11) of the microscope-(10) parallel to the optical axis.
10. (Currently Amended) The Mmethod according to claim 9, wherein said at least two different orientations of the object and said scanning an objective-(11) are conducted in an alternating mode.

11. (Currently Amended) ~~The M~~method according to claim 1one of the foregoing claims, wherein said positioning comprises suspending said at least one object in a liquid in said receptacle.

12. (Currently Amended) ~~The M~~method according to claim 1one of the foregoing claims, wherein said evaluating of the resulting data sets comprises a procedure intended to remove out-of-focus light and/or reconstruct a three dimensional map/image of the imaged object.

13. (Currently Amended) ~~The M~~method according to claim 1one of the foregoing claims, wherein said at least one object comprises at least one eukaryotic cell, at least one prokaryotic cell and/or at least one artificial particle.

14. (Currently Amended) ~~The M~~method according to claim 1one of the foregoing claims, wherein said microscope is used as a fluorescence microscope, a phase contrast microscope, a differential interference contrast microscope or a confocal microscope.

15. (Currently Amended) An Imaging device, ~~in particular~~ for high-resolution image recording of at least one object, comprising:

[[-]]~~a~~ microscope imaging system-(10) with an optical axis,

[[-]]a receptacle-(20) for accommodating said at least one object, said receptacle being arranged in said optical axis, and

[[-]]a control circuit-(30) being arranged for: (a) generating at least two first data sets per object, ~~wherein said at least two first data sets which represent intermediate images of the at least one~~ object with at least two different orientations relative to the optical axis, and ~~for~~(b) evaluating the data sets for obtaining an object image, and

characterized by

a driving device-(22, 32) ~~for moving~~ adapted to move the at least one object relative to the receptacle-(20).

16. (Currently Amended) The Imaging device according to claim 15, wherein said receptacle-(20) comprises a chamber-(21) of a fluidic microsystem and said driving device-(22, 32) comprises microelectrodes arranged at walls of said chamber-(21) and connected with said control circuit-(30).

17. (Currently Amended) The Imaging device according to claim 16, wherein said driving device-(22, 32) comprises at least three microelectrodes arranged in one plane in said chamber-(21).

18. (Currently Amended) The Imaging device according to claim 17, wherein said driving device-(22, 32) comprises at least six microelectrodes arranged in two planes in said chamber-(21).

19. (Currently Amended) The Imaging device according to ~~one of the claims 15 to 18~~, wherein said control circuit-(30) comprises a switching box-(34) ~~being~~ arranged for switching a rotation axis of the at least one object.

20. (Currently Amended) A ~~M~~ethod for high-resolution image recording of at least one object with a measuring device with a predetermined measurement field, comprising the steps of:

[[-]]positioning the at least one object in a receptacle ~~being~~ arranged in the measurement field of the measuring device,

[[-]]generating at least two first data sets per object, ~~wherein the at least two first data sets which represent intermediate data of the at least one object with at least two different orientations relative to the measurement field of the measuring device,~~ and the at least two

different orientations of the object are provided by moving the at least one object relative to the receptacle, and

[-]]evaluating the data sets for obtaining quantitative three dimensional information;

characterized in that

the different orientations of the object are provided by moving the object relative to the receptacle.

21. (Currently Amended) The Method according to claim 20, wherein said measuring device comprises a microscope and said measurement field ~~being the~~ is an optical axis of the microscope.

22. (Currently Amended) The Method according to claim 20, wherein said measuring device comprises an impedance measurement device and said measurement field ~~being~~ is the receptacle-itself.